CLAIM AMENDMENTS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of selecting a profile of a digital subscriber line, the method comprising:

determining, at a digital subscriber line control system, a number of code violations of the digital subscriber line by measuring a count of data transmission anomalies associated with data transmitted over the digital subscriber line during a measurement time period while the digital subscriber line is in operation, the data transmission anomalies including at least two of a signal to noise characteristic, an impulse noise characteristic, an interference characteristic, a bipolar violation, an excessive zeros error event, and a frame synchronization bit error;

determining a first data packet throughput value of the digital subscriber line using a first profile based on the number of code violations, the first profile including a first transmission speed associated with the digital subscriber line;

determining a second data packet throughput value of the digital subscriber line using a second profile based on the number of code violations, the second profile including a second transmission speed associated with the digital subscriber line; and

selecting, from the first profile and the second profile, a profile that has a the higher data packet throughput value,

wherein the first data packet throughput value is greater than the second data packet throughput value when the number of code violations is less than a threshold, and

wherein the first data packet throughput value is less than the second data packet throughput value when the number of code violations is greater than the threshold.

2. (Original) The method of claim 1, further comprising applying the selected profile to the digital subscriber line.

3. (Cancelled).

4. (Previously Presented) The method of claim 1, further comprising determining a third data packet throughput value associated with a third profile based on the number of code violations.

5. (Previously Presented) The method of claim 1, further comprising determining a plurality of data packet throughput values associated with a plurality of profiles based on the number of code violations and wherein a first set of the plurality of profiles corresponds to a first data line transmission speed and a second set of the plurality of profiles corresponds to a second data line transmission speed.

6. (Cancelled).

7. (Previously Presented) The method of claim 5, wherein a third set of profiles corresponds to a third data line transmission speed, and wherein the first data line transmission speed is 1536 kbits per second, the second data line transmission speed is 768 kbits per second, and the third data line transmission speed is 384 kbits per second.

8. (Original) The method of claim 5, wherein at least one of the first set of the plurality of profiles is an interleaved profile and another of the first set of the plurality of profiles is a non-interleaved profile.

9. (Previously Presented) The method of claim 1, further comprising generating a graphical display that illustrates the first data packet throughput value, the second data packet throughput value, and the number of code violations.

10. (Previously Presented) The method of claim 9, wherein the graphical display illustrates a first set of data packet throughput points for the first profile and a second set of data packet throughput points for the second profile.

11. (Currently Amended) The method of claim 1, wherein the number of code violations is ~~are~~ measured during a selected time period.

12. (Original) The method of claim 11, wherein the selected time period is less than thirty minutes.

13. (Cancelled).

14. (Currently Amended) The method of claim 10, wherein the first set of data packet throughput points form a first display curve, the second set of data packet throughput points form a second display curve, and wherein the first display curve and the second display curve are displayed in a manner to allow selection of a profile having a ~~the~~ highest data packet throughput for a selected number of code violations.

15. (Previously Presented) The method of claim 14, wherein the selected number of code violations is correlated with a level of noise present on the digital subscriber line.

16. (Previously Presented) The method of claim 1, wherein the first data packet throughput value and the second data packet throughput value include TCP/IP throughput values.

17. (Cancelled).

18. (Currently Amended) The method of claim 1, further comprising switching a ~~profile~~ from a previously applied profile to the selected profile on the digital subscriber line.

19.-22. (Cancelled).

23. (Currently Amended) A digital subscriber line control system comprising:

a controller including memory and a processor;

a profile database to store a plurality of profiles including a first profile and a second profile, wherein the first profile includes a first transmission speed associated with a digital subscriber line and the second profile includes a second transmission speed associated with the digital subscriber line;

a code violation measurement unit ~~responsive~~ to determine a number of code violations of the digital subscriber line by measuring a count of data transmission anomalies associated with data transmitted over the digital subscriber line during a measurement time period while the digital subscriber line is in operation, the data transmission anomalies including at least two of a signal to noise characteristic, an impulse noise characteristic, an interference characteristic, a bipolar violation, an excessive zeros error event, and a frame synchronization bit error;

the code violation measurement unit further operable to determine a first data packet throughput value of the digital subscriber line using the first profile based on the number of code violations, to determine a second data packet throughput value of the digital subscriber line using the second profile based on the number of code violations, wherein the first data packet throughput value is greater than the second data packet throughput value when the number of code violations is less than a threshold, and wherein the first data packet throughput value is less than the second data packet throughput value when the number of code violations is greater than the threshold; ~~a plurality of digital subscriber lines, the code violation measurement unit to provide code violation data associated with each of the digital subscriber lines by measuring a count of data transmission anomalies associated with data transmitted over each digital subscriber line during a measurement time period while each digital subscriber line is in operation;~~

~~a profile database to store a plurality of profiles including a first profile and a second profile;~~ and

a terminal device responsive to the controller, the terminal device configured to display a

graphical report, the graphical report including a first profile curve illustrating

~~data packet throughput values with respect to~~ code violation data for the first

profile and a second profile curve illustrating ~~data packet throughput values with~~

~~respect to~~ code violation data for the second profile;

wherein the controller <u>selects from the first profile and the second profile a profile that</u>

<u>has a higher data packet throughput value</u> ~~selects a profile from the profile~~

~~database that has the highest data packet throughput value at a particular~~

~~measured number of code violations for at least one of the digital subscriber lines~~.

24. (Previously Presented) The digital subscriber line control system of claim 23,
wherein the first profile curve intersects the second profile curve.

25.-26. (Cancelled).

27. (Previously Presented) The method of claim 1, wherein the count of data transmission
anomalies occurs while data is transmitted over the digital subscriber line at a data rate of
at least 384 kb/sec.

28. (Previously Presented) The method of claim 1, wherein the count of data transmission
anomalies occurs while data is transmitted over the digital subscriber line at a data rate of
at least 768 kb/sec.

29.-34. (Cancelled).